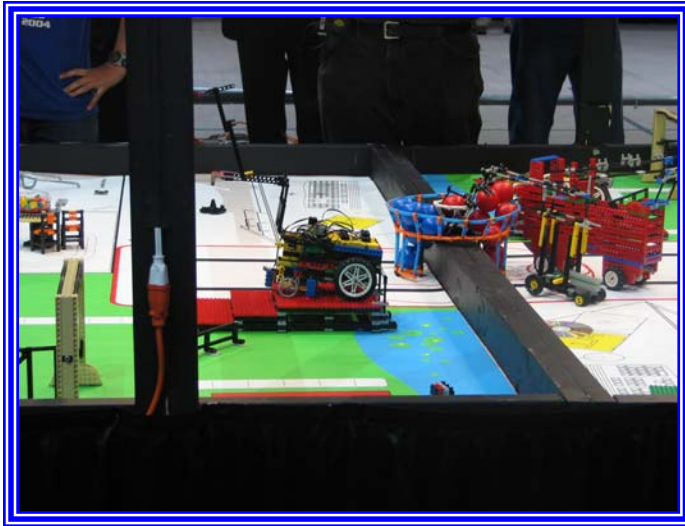


The Wright Robot Report

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WPAFB Educational Outreach

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FIRST LEGO® League No Limits World Festival

By David Gaier, coach FLL team R BOT ROCKS
from Tipp City, Ohio

The FIRST World Festival for 2005 was held in Atlanta's Georgia Dome from April 21 to April 23. This was the first time for me to attend it. I was signed up in February to be a FLL volunteer. My job was to manage the eight videotape cameras used to record each of the 73 FLL project presentations on Thursday afternoon. I watched as teams anxiously waited their turn to present each of their three presentations: project, technical and teamwork. The presentations were held within a curtained area next to the pit area of the Georgia World Congress Center. This was a very convenient location for the teams. The presentation schedule was delayed by 30 minutes as staff members tried in vain to get building maintenance to eliminate the disruptive static of the PA system. The teams forged ahead and coped with the noisy environment as best they could.

I saw some very creative and impressive props used for project presentations. The best prop in my opinion was Lucy's psychiatry booth from the Charlie Brown comics.

The pit area was absolutely amazing. Almost every team set up an elaborate display presenting information about them. I saw rotation and blinking signs, stuffed polar bears from the Alaska team and a dancing lobster from the Maine team. Many of the teams distributed pins, buttons, brochures and trinkets to other teams and FLL volunteers. I saw teams dressed in uniforms, jumpsuits and lab jackets. Some teams wore hats or bandanas as well. Several of these teams scored a perfect round on the No Limits Mission. Eight competition tables were used on the Georgia Dome floor to allow all these teams to run their three rounds on Friday. The atmosphere inside the dome was electric as each team tried to best their previous score. I saw that most teams used a satellite platform to deliver the seven or eight balls to the center basket. But even more impressive was the device several teams made to remove the other team's ball from the center basket and deposit one of their own.

Basically each team had a unique robot since no two robots looked or behaved alike. Most of the teams used a modular robot that consisted of a small simple base platform with the RCX inside it. Then attachments were easily connected on top of the base to accomplish each mission.

I found out that many teams favor the ROBOLAB software over the RIS software. I attended a ROBOLAB presentation by an ex-member of Mindstorm Mayhem from New Hampshire. The presenter and coaches in the audience felt that ROBOLAB's increased power and flexibility outweigh its longer learning curve.

I attended a VEX Robotics presentation by college students from Massachusetts. I was impressed with the functionality and low cost of the Radio Shack VEX Robotics Kit (\$299). In the future, software will be sold that will allow the operator to program the kit robot for autonomous operation. But for now the owner uses a radio control transmitter to operate the robot. The robot kit comes with erector style metal

beams and screws so its fabrication is quick and easy. You choose the configuration of the robot from the manual or build it your own way. The VEX Robotic Competition was a pilot program this year for students in high school.

Saturday morning was the climax of the FLL event as awards were presented. I felt the FLL chairman's words were right on when he said that all teams in attendance were winners. You will want to visit the FIRST web site to get additional information regarding the distribution of trophies at the awards ceremony.

I thoroughly enjoyed being an FLL volunteer for this event and would recommend it for FLL coaches. It was a fantastic opportunity to see world class teams compete at this event. I met a lot of nice parents, volunteers and coaches. It was great to visit with the Circuit Breakers, a FLL team from Sylvania, Ohio. I also enjoyed having dinner with the Techno Funk Connection, a VEX Robotics team from Dayton's Boonshoft Museum of Discovery.



Pit display for team #1656, RoboAlliance from Melbourne, Florida

FIRST LEGO® League Robotics Mini-Institute

WPAFB Educational Outreach will offer three, week-long summer training classes in July for FIRST LEGO® League coaches. The training will include: an overview of the FIRST LEGO® League Robotics Competition program; building LEGO® Mindstorms robots and attachments; and robot programming with LEGO® Mindstorms Robotics Inventions Systems 2.0 and RoboLab 2.5.

The workshops will be held at The Prairies Community Center, home of STARBASE, Wright-Patt. The course will be repeated three times. The first session, July 11-15, 2005, will be a scholarship workshop for first-time coaches who are connected to a specific school district, have registered an FLL team for 2005 through the US FIRST web site (www.usfirst.org), and have submitted a letter from the school principal on school letterhead, confirming the school's commitment to starting an FLL team in 2005. Those who qualify will receive a **FREE** LEGO® Mindstorms Robotics Invention System 2.0 robot kit, valued at \$200.00, upon successful completion of the course.

The other two workshops scheduled for July 18-22 and July 25-29, 2005 from 8:30 a.m. to 2:30 p.m. are open to anyone interested in learning more about the program or already have a team and want to refresh those robot building and programming skills.

Applications can be found at the WPAFB Educational Outreach web site at <http://edoutreach.wpaafb.af.mil/Robotics.htm> and completed applications are due by June 10, 2005.

The summer training is free. For more information, contact Kathy Levine at kathleen.levine@wpaafb.af.mil or (937) 255-5259.

FLL Ohio News?

If you have anything going on in your region, community, school, etc. related to the FIRST LEGO® League program, feel free to contact me. I can put your information into our monthly newsletter, which will keep the FLL community in Ohio connected. Contact Kathy Levine, the Ohio FLL State Coordinator, at Kathleen.levine@wpaafb.af.mil with your information.



The Circuit Breakers from Sylvania, Ohio on the practice table at the FLL World Festival in Atlanta.

FIRST Robotics Championships

FIRST, the non-profit organization (**F**or **I**nspiration and **R**ecognition of **S**cience and **T**echnology), held its FIRST Robotics Championship in the Atlanta Georgia Dome and World Conference Center April 21 – 23, 2005.

More than 340 FIRST Robotics Competition (FRC) Teams competed at the event, as did 75 FIRST LEGO® League (FLL) teams from 20 countries: Austria, Brazil, Canada, China, Denmark, France, Germany, Israel, Japan, Mexico, Norway, Singapore, South Africa, South Korea, Sweden, Switzerland, the Netherlands, Turkey, the United Kingdom, and the United States. 80 teams of high school students took up the FIRST challenge to explore and demonstrate the new VEX program, sponsored by Radio Shack. There were also several Junior FIRST LEGO® League (JFLL) displays, a new program for young children ages 6-9 years old that was piloted in a few select states in 2004. Every school-age group was represented from kindergarten to seniors in high school, and the excitement, creativity, and innovative design and strategy displayed by almost 5,000 children from around the United States and the world was impressive beyond belief.

Eight teams of FRC high school students represented Ohio: The Delphi E.L.I.T.E. from Warren G. Harding High School in Warren; The Scarabian Knights from East Technical High School in Cleveland; The Botcats from Grandview Heights High School in Columbus; The Lightning Cobras from Live Oaks High School in Milford; The Robocats from Girard High School in Girard; The

Cat Attack from The Sylvania Schools in Sylvania; The Wirestrippers from The Columbus School for Girls in Columbus; and The Thunderhawks from Butler Tech and Lakota East High School in Liberty Township. Check out the FRC winners at <http://www2.usfirst.org/2005comp/Events/Einstein/awards.html> on the FIRST web site.

The Director's Award Winner from the Ohio FLL State Championship, The Circuit Breakers from Sylvania, represented Ohio. They earned a Gracious Professionalism Award. Check out the other FLL winners at <http://www.usfirst.org/jrobotcs/2005fwf-awards.htm> on the FIRST web site.

The Techno Funk Connection, the third place Director's Award winning team from the Ohio FLL State Championship, graduated from LEGOs to the new VEX Robotics Program by participating in the VEX exposition.

Congratulations to all of the Ohio FIRST teams! Remember, team registration for the new 2005 Ocean Odyssey Challenge began on May 2, 2005.



The Circuit Breakers with the Team of Japan

Circuit Breaker Team Quotes: "The tournament was incredible, especially being inside the Georgia Dome."; "It was awesome to get to know people from other countries!"; "It was amazing to see how many different ways the teams came up with to solve the same issue!"; "It was great exchanging buttons & candy with other teams."; "This was the best experience I ever had!"